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EXAMINER

AMINI, JAVID A

| ART UNIT | PAPER NUMBER |
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2672

3

DATE MAILED: 08/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,576

Applicant(s)

WILKINSON ET AL.

Examiner

Javid A Amiri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-28 rejected under 35 U.S.C. 103(a) as being unpatentable over Dye, and further in view of Silverbrook.

1. Claims 1 and 14.

Dye in (col. 3, lines 59-66) teaches “a graphics rendering software program for providing instructions to one or more processors to render graphics on a display of an embedded computing device configured for establishing a (Dye in Fig. 3, NIC 134, teaches) network connection with at least one other computing device, comprising: The step of “an application layer” is obvious because when two hosts on a LAN running file transfer protocol involved application, transport, network and a link layers. Dye in Fig. 5 teaches graphics engine 212 and execution engine 210. But Dye does not explicitly specify “a graphics toolkit”. However Silverbrook in col. 12, lines 45-50 teaches, that is possible to generate complex object based mattes by using drawing tools with the colour component suppressed. Silverbrook in Figs. 4-6 teaches “a graphics driver for rendering a plurality of drawing surfaces, including a first drawing surface and a second drawing surface, on a display of the embedded computing device”. Silverbrook in Figs. 4-6 teaches, “the graphics driver is configured to render the first drawing surface at least partially overlapping the second drawing surface on the display”. Silverbrook in Fig. 6, from band 1-4 teaches, “the first

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drawing surface is rendered as partially overlapping the second drawing surface, a visible portion of the second drawing surface is computed as a set of rectangular clip segments". Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Silverbrook into Dye in order to have simplicity of Silverbrook to optimize for speed, and the compatibility of Dye with other applications.

2. Claim 2.

Dye in Fig. 16 teaches the step of "the graphics driver is further configured to increment a visibility tag corresponding to second drawing surface when the visible portion of the second drawing surface is changed".

3. Claim 3.

Dye in Fig. 16 teaches the step of "the graphics driver is further configured to compute a new set of rectangular clip segments when the visible portion of the second drawing surface is changed". Also Silverbrook in Fig. 6 teaches rectangular clips.

4. Claim 4.

Dye in Fig. 16 teaches the step of "the first drawing surface and the second drawing surface, including both the visible portion and an obscured portion, comprise rectangular borders". Also Silverbrook in Fig. 6 teaches rectangular borders.

5. Claim 5.

Dye in Fig. 16 teaches the step of "each rectangular clip segment of the set of rectangular clip segments is iteratively output to the display for displaying the visible portion of the second drawing surface".

6. Claims 6 and 16.

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Dye in (col. 3, lines 59-66) teaches “a graphics rendering software program for providing instructions to one or more processors to render graphics on a display of an embedded computing device configured for establishing (Dye in Fig. 3, NIC 134, teaches) a network connection with at least one other computing device, comprising: The step of “an application layer” is obvious because when two hosts on a LAN running file transfer protocol involved application, transport, network and a link layers. Dye in Fig. 5 teaches graphics engine 212 and execution engine 210. But Dye does not explicitly specify “a graphics toolkit”. However Silverbrook in col. 12, lines 45-50 teaches, that is possible to generate complex object based mattes by using drawing tools with the colour component suppressed. Silverbrook in Figs. 4-6 teaches “a graphics driver for rendering a plurality of drawing surfaces, including a first drawing surface and a second drawing surface, on a display of the embedded computing device”. Silverbrook in Figs. 4-6 teaches, “the graphics driver is configured to render the first drawing surface at least partially overlapping the second drawing surface on the display”. Silverbrook in Fig. 6, from band 1-4 teaches, “when the first drawing surface is rendered as partially overlapping the second drawing surface, a visible portion of the second drawing surface is computed as a set of rectangular clip segments”. The step of “the set of rectangular clip segments is stored as a graphics context object corresponding to unobscured segments of the second drawing surface” is obvious because, the rectangular clip segments is stored, whether corresponds to either unobscured or to obscured segments. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Silverbrook into Dye in order to have simplicity of Silverbrook to optimize for speed, and the compatibility of Dye with other applications.

7. Claim 7.

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Dye in Fig. 16 teaches the step of “the graphics driver is further configured to increment a visibility tag corresponding to second drawing surface when the visible portion of the second drawing surface is changed”.

8. Claim 8.

Dye in Fig. 16 teaches the step of “the graphics driver is further configured to compute a new set of rectangular clip segments when the visible portion of the second drawing surface is changed”.

Also Silverbrook in Fig. 6 teaches rectangular clips.

9. Claim 9.

Dye in Fig. 16 teaches the step of “the first drawing surface and the second drawing surface, including both the visible portion and an obscured portion, comprise rectangular borders”. Also Silverbrook in Fig. 6 teaches rectangular clips.

10. Claims 10 and 18.

Dye in (col. 3, lines 59-66) teaches “a graphics rendering software program for providing instructions to one or more processors to render graphics on a display of an embedded computing device configured for establishing (Dye in Fig. 3, NIC 134, teaches) a network connection with at least one other computing device, comprising: The step of “an application layer” is obvious because when two hosts on a LAN running file transfer protocol involved application, transport, network and a link layers. Dye in Fig. 5 teaches graphics engine 212 and execution engine 210. But Dye does not explicitly specify “a graphics toolkit”. However Silverbrook in col. 12, lines 45-50 teaches, that is possible to generate complex object based mattes by using drawing tools with the colour component suppressed. Silverbrook in Figs. 4-6 teaches “a graphics driver for rendering a plurality of drawing surfaces, including a first drawing surface and a second drawing

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surface, on a display of the embedded computing device”. Silverbrook in Figs. 4-6 teaches, “the graphics driver is configured to render the first drawing surface at least partially overlapping the second drawing surface on the display”. Silverbrook in Fig. 6, from band 1-4 teaches, “when the first drawing surface is rendered as partially overlapping the second drawing surface, a visible portion of the second drawing surface is computed as a set of rectangular clip segments”. The step of “the set of rectangular clip segments is stored as a graphics context object corresponding to unobscured segments of the second drawing surface”, is obvious because, the rectangular clip segments is stored, whether corresponds to either unobscured or to obscured segments.

Silverbrook in Fig. 6, from band 1-4 teaches, “rectangular clip segment of the set of rectangular clip segments is iteratively output to the display for displaying the visible portion of the second drawing surface”. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Silverbrook into Dye in order to have simplicity of Silverbrook to optimize for speed, and the compatibility of Dye with other applications.

11. Claim 11.

Dye in Fig. 16 teaches the step of “the graphics driver is further configured to increment a visibility tag corresponding to second drawing surface when the visible portion of the second drawing surface is changed”.

12. Claim 12.

Dye in Fig. 16 teaches the step of “the graphics driver is further configured to compute a new set of rectangular clip segments when the visible portion of the second drawing surface is changed”.

Also Silverbrook in Fig. 6 teaches rectangular clips.

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13. Claim 13.

Dye in Fig. 16 teaches the step of “the first drawing surface and the second drawing surface, including both the visible portion and an obscured portion, comprise rectangular borders”. Also Silverbrook in Fig. 6 teaches rectangular borders.

14. Claim 15.

The steps of “the graphics rendering software program of Claim 14, wherein the graphics driver includes: a shape function layer including a target architecture specific instruction set for setting and retrieving pixel values, respectively, into and from a one-dimensional frame buffer memory; a frame buffer access macro layer including a set of macros for in lining into the shape function layer.” are obvious, because these functions are part of the graphics driver.

15. Claim 17.

The steps of “the graphics rendering software program of Claim 16, wherein the graphics driver includes: a shape function layer including a target architecture specific instruction set for setting and retrieving pixel values, respectively, into and from a one-dimensional frame buffer memory; and a frame buffer access macro layer including a set of macros for in lining into the shape function layer” are obvious, because these functions are part of the graphics driver.

16. Claim 19.

The steps of “the graphics rendering software program of Claim 18, wherein the graphics driver includes: a shape function layer including a target architecture specific instruction set for setting and retrieving pixel values, respectively, into and from a one-dimensional frame buffer memory;

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and a frame buffer access macro layer including a set of macros for in lining into the shape function layer” are obvious, because these functions are part of the graphics driver.

17. Claim 20.

Dye in (col. 3, lines 59-66) teaches “a method of rendering graphics including overlapping drawing surfaces on a display of an embedded computing device configured for establishing (Dye in Fig. 3, NIC 134, teaches) a network connection with at least one other computing device, comprising the steps of: Dye does not clearly specify the calculation of clip segments, however Silverbrook in (col. 3, lines 10-49) teaches the step of “computing a set of clip segments corresponding to a visible portion of a partially obscured drawing surface”. Silverbrook in Figs. 4-6 teaches, “rendering the partially obscured drawing surface along with an overlapping drawing surface on the display”. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Silverbrook into Dye in order to have simplicity of Silverbrook to optimize for speed, and the compatibility of Dye with other applications.

18. Claim 21.

Silverbrook in Fig. 6, from band 1-4 teaches, “the clip segments corresponds to rectangular portions of the visible portion of the partially obscured drawing surface”.

19. Claim 22.

Dye in Fig. 16 teaches the step of “the partially obscured drawing surface and the overlapping drawing surface comprise rectangular borders”. Silverbrook in Fig. 6 teaches rectangular borders.

20. Claim 23.

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The step of “storing the set of clip segments as a graphics context object corresponding to unobscured segments of the partially obscured drawing surface” is obvious because, the rectangular clip segments is stored, whether corresponds to either unobscured or to obscured segments.

21. Claim 24.

Silverbrook in Fig. 6, from band 1-4 teaches, “the clip segments corresponds to rectangular portions of the visible portion of the partially obscured drawing surface”.

22. Claim 25.

Dye in Fig. 16 teaches the step of “the partially obscured drawing surface and the overlapping drawing surface comprise rectangular borders”.

23. Claim 26.

Silverbrook in Fig. 6, from band 1-4 teaches, “the step of iteratively outputting each clip segment of the set of clip segments to the display for displaying the visible portion of the partially obscured drawing surface”.

24. Claim 27.

The step of “the clip segments correspond to rectangular portions of the visible portion of the partially obscured drawing surface” is obvious because, the rectangular clip segments is stored, whether corresponds to either unobscured or to obscured segments.

25. Claim 28.

Dye in Fig. 16 teaches the step of “the partially obscured drawing surface and the overlapping drawing surface comprise rectangular borders”. Silverbrook in Fig. 6 teaches rectangular borders.

Double Patenting

Applicant is advised that should claims 1, 6, 10, 14, 16 and 18 be found allowable, claims 1, 6, 10, 14, 16 and 18 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Examiner's note: Claims 1 and 14 are duplicated. Claims 6 and 16 are duplicated. Claims 10 and 18 are duplicated.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-8705 for regular communications and 703-746-8705 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Javid A Amini
Examiner
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Javid Amini

August 4, 2003



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